VS

### TECHNICAL GLASS

Bruce Jennings
CEO & President
Schott Glass Technologies Inc.





#### COST DRIVEN



COST DRIVEN

TECHNICAL GLASS





COST DRIVEN

TECHNICAL GLASS



TECHNOLOGY DRIVEN

Jor Glass is high

Transparent polymers replacing glass lenses in ophthalmic applications

- Transparent polymers replacing glass lenses in ophthalmic applications
- Plastic containers replacing glass ones



- Transparent polymers replacing glass lenses in ophthalmic applications
- Plastic containers replacing glass ones
- Replacement of glass by plastic in the automotive industry has started



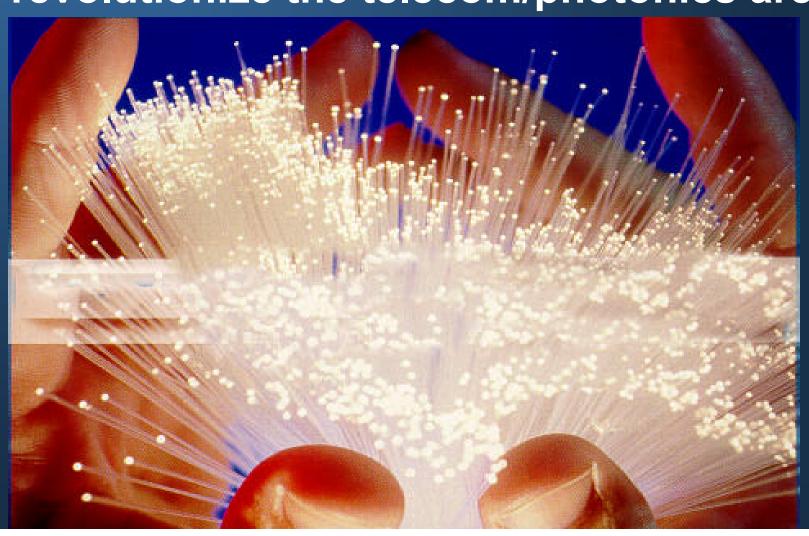




# Thus the commodity segments do not have a bright future

Glass Segment

Silica optical fibers have and continue to revolutionize the telecom/photonics area



# Silica optical elements for microlithography applications



Glass and glass-ceramics to replace aluminum as the substrate material for hard disc drive applications



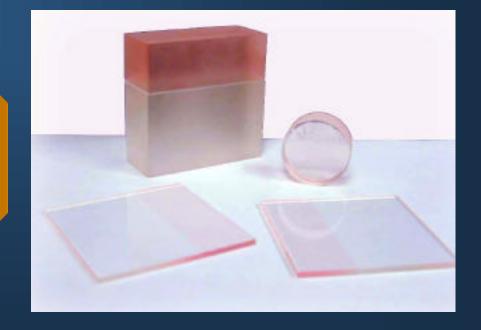
# Substrate and cover glasses for display technology



Active and Passive glasses for telecom components such as:

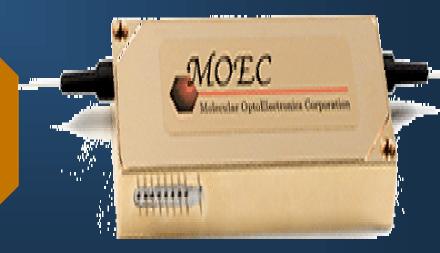
Active and Passive glasses for telecom components such as:

Planar waveguide devices (active, passive, hybrid glasses)



Active and Passive glasses for telecom components such as:

Optical fiber components such as optical amplifiers



Active and Passive glasses for telecom components such as:

Drop/add components



Active and Passive glasses for telecom components such as:

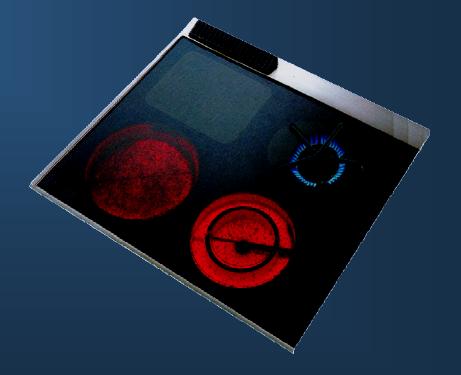
DWDM multiplexing and demultiplexing components



## Glass and glass-ceramics for home applications

# Glass and glass-ceramics for home applications

CERAN® for stove tops



### Glass and glass-ceramics for home applications

Windows for ovens and heating applications



### Glass and glass-ceramics for home applications

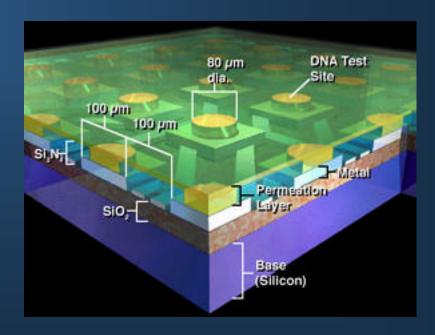
Fiber optic and waveguide technology for lighting



### Substrate glasses for biomedical devices

### Substrate glasses for biomedical devices

**DNA Chips** 



### Substrate glasses for biomedical devices

Microarray Chips



### Substrate glasses for biomedical devices

Lab-on-a-chip Technology

